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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,091	02/15/2001	Chung-Yen Lu	3626-0142P	4483
2292	7590	08/22/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			COUSO, YON JUNG	
			ART UNIT	PAPER NUMBER
			2625	

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,091

Applicant(s)

LU, CHUNG-YEN

Examiner

Yon Couso

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Applicant's arguments filed February 25, 2004 have been fully considered but they are not persuasive.

a. With the amendment made to the claims 1 and 4, the Z value is specified to coordinate Z-value. However, it is noted that there is nothing in the specification to explain coordinate Z-value in relation to the X or Y coordinates. Is the coordinate Z-value equal the A(x, y, z), z value in three dimensional coordinate system? If then, how can it also be a threshold value as in page 4, line 21-page 5, line 4 (specification) or pixel brightness (Table 1 in the specification)? Please explain.

b. With regard to Harrington et al, the rejection has been withdrawn in view of the amendment made to the claims.

2. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification is not clear as to what the Z-value is. Page 4, line 14-page 15, line 7 describes Z-value in general. However, from the description it is unclear and confusing as to what the Z-value represents. From the Table 1, it appears that the Z-value is the pixel brightness. However, page 6, line 14-18 describes "Step S33: Judging if the pixel located at the up-most layer of the graphic image in accordance with the Zero-Z test, if $Z=0$ which indicates that the pixel located at the up-most layer of the graphic image, then jump to step S31, otherwise proceed to Step S34". Moreover, page 4, line 21-page 5, line 4 describes the Z value as threshold values. Please clarify as to

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what Z-value stands for in the specification (brightness value, coordinate value or threshold value). It would be essential for understanding the invention and therefore to make and/use of the invention.

With the amendment made to the claims 1 and 4, the Z value is specified to coordinate Z-value. However, it is noted that there is nothing in the specification to explain coordinate Z-value in relation to the X or Y coordinates. Are the coordinate Z-value equals the A(x, y, z), z value in three dimensional coordinate system? If then, how can it also be a threshold value as in page 4, line 21-page 5, line 4 (specification) or pixel brightness (Table 1 in the specification)?

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins et al (US Patent No. 4,918,626).

Watkins teaches a post filtering method for eliminating jagged effects before outputting graphic image in accordance with the characteristics of each of a pixels to prioritize pixels to perform filtering (column 1, line 60 and column 2, line 14). Watkins also teaches calculating distance ΔZ between the planes of the polygons to prioritize the pixels to be filtered (column 4, line 3-column 5, line 10). Even though Watkins does not teach details on judging if a coordinate Z-value of the pixel's is equal to zero, if it is, then not performing filtering to the pixel and if the coordinate Z-value of the pixel is not

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equal to zero, then judging if the pixel is located at the intersection of a Z-plane, if it is, then performs filtering to the pixel, Watkins discloses calculating distance ΔZ between the planes of the polygons to prioritize the pixels to be filtered (column 4, line 3-column 5, line 10). In doing so, it would have been obvious to one of ordinary skill in the art, given the reference at the time the invention was made, not to perform filtering to the pixel if a coordinate Z-value of the pixel's is equal to zero because when Z-value equals zero, there is no plane in z-coordinate to be considered to eliminate the jagged effect of the graphic image.

As per claims 3 and 5, Watkins a digital filter (column 2, lines 3-28; column 5, lines 1-4; and column 1, lines 30-37).

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakao et al and Deering are also cited.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

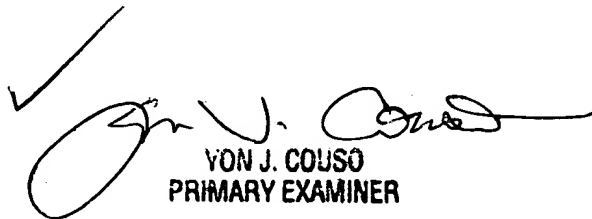
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yon Couso whose telephone number is (571) 272-7448. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YJC

✓

YON J. COUSO
PRIMARY EXAMINER

July 29, 2005